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EXAMINER
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SHIN, KYUNG H

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/473,098

Applicant(s)

ESTRADA ET AL.

Examiner

Kyung H. Shin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### **Response to Amendment**

1. This action is responding to application papers filed 5/26/2005.
2. Claims **1 - 15** are pending. Claims **1, 3, 8, 9, 10, 13, 15** are amended. Claims **11, 12, 14** have been cancelled. Independent claims are **1, 3, 8, 9, 10, 13, 15**.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejection - 35 USC § 103***

The text of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. **Claims 1 - 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Salas (US Patent No. 6,233,600) in view of Maurille (US Patent No. 6,484,196) and further in view of Cutler et al. (US Patent No. 5,129,083).

**Regarding Claim 1** [Currently Amended], Salas discloses a collaboration space including a plurality of rooms in a hierarchical structure with access control list control on rooms and access control list control on forward pointers to child rooms (see Salas col. 3, lines 49-51: plurality of rooms with hierarchical pointers and access mechanism), comprising:

- c) said readers field being a members object for identifying members authorized to access said room and for each member a level of authorization. (see Salas col. 13, lines 32-34; col. 14, lines 37-39: object access control (readers field) mechanism)
- a) Salas discloses a database and an access control list for users authorized to access said room and a notes, each subroom being an independent entity belonging to said place, said place having a first data note including a directory of members of said place. (see Salas col. 3, lines 49-51; col. 13, lines 32-34) Salas does not specifically disclose a database system for management of collaborative space. However, Maurille discloses a place comprising a plurality of subrooms, (see Maurille col. 6, lines 44-57: database system for member, message information) each subroom within said place having a data note associated therewith containing an access control list of members selected exclusively from said directory of members by a member of said place having manager or author authority with respect to said subroom for specifying users of said place authorized to access said subroom, and Cutler specifically discloses the usage of object oriented technology utilizing access control list techniques for collaborative space management (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists controlling access to objects, object inheritance- child has equal or less access capabilities of parent).

- b) Salas discloses a readers field for providing access control list type control on said forward pointer and a child room and subroom, each subroom being an independent entity belonging to said place, said place having a first data note including a directory of members of said place. (see Salas col. 13, lines 32-34; col. 14, lines 37-39) Salas does not specifically disclose a database system for collaborative workspace. However, Maurille discloses forward and reverse pointers for linking said subrooms (see Maurille col. 16, lines 17-22; col. 8, lines 33-38: to/from (forward/reverse) pointers), each said forward pointer including indicia specifying the address location of the entity forming said child room (see Maurille col. 6, lines 44-57: database system for member, message information).
- d) Salas discloses a document readers field for a document containing data in said subroom being a members object for identifying a subset of members of said place authorized to access a subroom who are also authorized to access said document. (see Salas col. 13, lines 32-34: readers field), and Cutler specifically discloses the utilization of object oriented techniques such as access control list techniques for collaborative space management (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists controlling access to objects, object inheritance- child has equal or less access capabilities of parent).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salas to operate a collaborative workspace for

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message communications between members as taught by Maurille, and to modify Salas to enable utilization of standard object oriented techniques for collaborative space processing such as pointers to objects containing access control lists (ACLs) and controlling access to objects as taught by Cutler. One of ordinary skill in the art would be motivated to employ Maurille in order to optimize message processing and display capabilities for a networked collaborative communications environment. (see Maurille col. 6, lines 13-16: "*... Message mode allows a user to interact with a private bulletin board in which his messages (i.e., any message involving the user as sender or recipient) are instantly available and displayed with full threading information ...*"), and to employ Cutler in order to efficiently enhance security by providing limited visibility of computer resources and protecting data integrity. (see Cutler col. 1, lines 47-53: "*... access control should also provide limited "visibility" of computer resources ... unauthorized user cannot obtain information about another user ... protect data integrity ... protect against simultaneous accesses by different authorized processes ...*")

**Regarding Claim 2 [Original],** Salas discloses the collaboration space of claim 1, said levels of authorization including manager, author, and reader. (see Salas col. 13, lines 27-37; col. 14, lines 44-54: authorization levels (manager, reader, coordinator) are managed to allow create, modify, edit procedures)

**Regarding Claim 3** [Currently Amended], Salas discloses a collaboration space, comprising:

- b) a member directory for said place identifying users authorized to enter said place; (see Salas col. 3, lines 49-51: member information and access controls)
- c) each said room comprising one or more pages, and for each said room a members object for identifying a subset of members of said place authorized to access said room and for each member a level of authorization, each member of said subset of members being a user authorized in said member directory to enter said place; (see Salas col. 3, lines 49-51; col. 14, lines 39-44: member information and access levels)
- a) Salas discloses a plurality of rooms with pointers in a hierarchical structure for a collaborative workspace. (see Salas col. 3, lines 49-51) Salas does not specifically mention forward and backward pointers. However, Maurille discloses objects (rooms) linked by forward and backward pointers. (see Maurille col. 16, lines 17-22; col. 8, lines 33-38; pointers with to/from (forward/backward) pointers for parent/child navigation)
- d) Salas discloses a readers field for providing access control list control on said forward pointer, said readers field for identifying those members of said subset of members of said place authorized to access a parent room that are also authorized to access a child room and a database for said rooms including a parent room and a child room structure for collaborative workspace. (see Salas col. 3, lines 49-51; col. 13, lines 32-34) Salas does not disclose forward and

backward pointers. However, Maurille discloses said pointers comprising forward and backward pointers for enabling the security of each said room to be independently managed, said forward pointers including indicia identifying said child room, indicia specifying the address location of the database forming said child room (see Maurille col. 6, lines 44-57: database system for member, message information), and Cutler specifically discloses the utilization of object oriented techniques such as access control list techniques for collaborative space management (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists controlling access to objects, object inheritance- child has equal or less access capabilities of parent).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salas to operate a collaborative workspace for message communications between members as taught by Maurille, and to modify Salas to enable utilizing standard object oriented techniques such as access control lists (ACLs) controlling access to objects for collaborative space management as taught by Cutler. One of ordinary skill in the art would be motivated to employ Maurille in order to optimize message processing and display capabilities for a networked collaborative communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in order to efficiently enhance security by providing limited visibility of computer resources and protecting data integrity (see Cutler col. 1, lines 47-53).



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**Regarding Claim 4** [Previously Presented], Salas discloses the collaboration space of claim 3, said readers field including an access authority for each reader authorized to enter said room selectively as manager, author or manager. (see Salas col. 7, lines 8-10 col. 14, lines 39-54: readers field access control information for room with different access levels)

**Regarding Claim 5** [Previously Presented], Salas discloses the collaboration space of claim 3, each said forward pointer being a secure pointer by carrying the same level of security as the child room to which it points. (see Salas col. 8, lines 12-16; col. 6, lines 52-56; col. 7, lines 8-10: room template controls room generation, parent-child relationship, child inherits characteristics of parent (including access capabilities)) Salas does not specifically disclose the access control level for a child room is the same or less than the access control level of a parent room. However, Cutler discloses the same level of security as the child room to which it points. (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists controlling access to objects, object inheritance- child has equal or less access capabilities of parent)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salas to enable utilizing standard object oriented techniques such as access control lists (ACLs) controlling access to objects for collaborative space management as taught by Cutler. One of ordinary skill in the art would be motivated to employ Cutler in order to efficiently enhance security by providing

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limited visibility of computer resources and protecting data integrity. (see Cutler col. 1, lines 47-53)

**Regarding Claim 6** [Previously Presented], Salas discloses the collaboration space of claim 5, each said forward pointer carrying in said readers field the same security as that of the subroom to which it points. (see Salas col. 8, lines 12-16; col. 6, lines 52-56; col. 7, lines 8-10: room template controls room generation, parent-child relationship, child (subroom) inherits characteristics of parent (including access capabilities))

**Regarding Claim 7** [Previously Presented], Salas discloses the collaboration space of claim 6, further comprising a display for presenting to a specific user viewing a parent room a listing of its subrooms, said listing including for said specific user only those subrooms for which said readers field in said forward pointer includes an entry authorizing access by said specific user. (see Salas col. 12, lines 7-22: user interface for child (subroom) display)

**Regarding Claim 8** [Currently Amended], Salas discloses an access control system for controlling user access to forms and documents a collaboration space organized in a hierarchical structure of parent rooms and child rooms containing said forms and documents, comprising:

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- a) an access control list for specifying users who can are members of said collaboration space; (see Salas col. 14, lines 31-36: only specific users can access room based on access permissions)
- b) for users authorized to access said collaboration space, said access control list further specifying access levels and roles determining the specific actions said users are authorized to perform, said roles including reader, author, and manager; (see Salas col. 14, lines 37-44: access control level determines user's role)
- c) a form selectively including a form access list; (see Salas col. 13, lines 27-34: objects (forms) contain access control (readers) field)
- d) a room in said collaboration space including at least one document created from said form; (see Salas col. 3, lines 49-51; col. 13, lines 46-51: document information linked to rooms)
- f) said form access list identifying a subset of users who are members of said collaboration space who are authorized to read documents created from said form; (see Salas col. 14, lines 46-50: access permissions specify users that can read objects (documents))
- g) each said forward pointer to a document including indicia identifying said document indicia specifying the address location of said document and a readers field for providing access control list control on said forward pointer including a document access field selectively including for each user authorized to access said document indicia specifying whether said authorized user can read or

modify said document; users identified in any said form access list for said form from which said document was created being included in said readers field; (see Salas col. 13, lines 32-34; col. 14, lines 44-54: object (i.e. readers) access field, capability to read and/or modify linked documents)

- h) entries in said readers field granting authorization to an individual user equal to or less than the authorization for said individual user in said access control list; (see Salas col. 13, lines 32-34: objects (rooms) indicate a field (readers field) with access control parameters)
  - i) entries in said authors field selectively granting authorization to a user authorized as an author in said access control list to edit a document which said author creates. (see Salas col. 14, lines 46-50: access permissions specify users that can edit objects (documents))
- e) Salas discloses a hierarchical structure for rooms linked by pointers. Salas does not specifically disclose a forward pointer. However, Maurille discloses a forward pointer linking said form to said document and a reverse pointer linking said document, back to said form; (see Maurille col. 16, lines 17-22: to/from (forward/backward) pointers)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salas to operate a collaborative workspace for message communications between members as taught by Maurille, and to modify Salas to enable utilizing standard object oriented techniques such as access control lists (ACLs) controlling access to objects for collaborative space

management as taught by Cutler. One of ordinary skill in the art would be motivated to employ Maurille in order to optimize message processing and display capabilities for a networked collaborative communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in order to efficiently enhance security by providing limited visibility of computer resources and protecting data integrity (see Cutler col. 1, lines 47-53).

**Regarding Claim 9, 13 [Currently Amended],** Salas discloses a method for controlling access to rooms within a collaboration place, comprising the steps of:

- a) maintaining for said collaboration place an access control list identifying those users authorized to enter said place; (see Salas col. 3, lines 49-57: member information and access controls)
- c) displaying a parent room to a specific user, said parent room including a list of children rooms for which said readers fields on said forward pointers authorize said specific user access. (see Salas Figure 1; col. 6, lines 39-55: display interface for parent room)
- b) Salas discloses a readers field for providing access control list control on said forward pointer, said readers field exclusively specifying a subset of said users authorized to enter said place. Salas does not specifically disclose forward/backward pointers or a database system for the collaborative workspace. However, Maurille discloses said forward pointers including indicia identifying a child room, indicia specifying the address location of the database

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forming said child room; (see Maurille col. 16, lines 17-22; col. 8, lines 33-38; pointers with to/from (forward/backward) pointers for parent/child navigation: Maurille col. 6, lines 44-57: database system for member, message information), and Cutler discloses parent/child object access control list inheritance. (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists controlling access to objects, object inheritance- child has equal or less access capabilities of parent)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salas to operate a collaborative workspace for message communications between members as taught by Maurille, and to modify Salas to enable utilizing standard object oriented techniques such as access control lists (ACLs) controlling access to objects for collaborative space management as taught by Cutler. One of ordinary skill in the art would be motivated to employ Maurille in order to optimize message processing and display capabilities for a networked collaborative communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in order to efficiently enhance security by providing limited visibility of computer resources and protecting data integrity (see Cutler col. 1, lines 47-53).

**Regarding Claim 10 [Currently Amended]**, Salas discloses a method for creating a child room within a collaboration place data base, comprising the steps of:

- a) providing for said collaboration place data base a first access control list identifying users authorized to access said data base; (see Salas col. 13, lines 32-34; col. 14, lines 31-36: access control mechanism to determine authorized user access)
- b) providing for said child room a back pointer to a parent room; (see Salas col. 6, lines 39-55: backward pointer to parent) and
- c) Salas discloses a readers field indicating authorized access to a room for providing a second access control list specific to said forward pointer and providing at said parent room for said child room a forward pointer from said parent room to said child room. (see Salas col. 13, lines 32-34; col. 14, lines 37-39: object access control) Salas does not specifically disclose a database system for collaborative space. However, Maurille discloses said pointer including indicia identifying said child room, indicia specifying the address location of the database forming said child room. (see Maurille col. 6, lines 44-57: database system for member, message information)
- d) initially including in said readers access field for a child room created from a form users identified in a form access list identifying users authorized to read rooms created from said form; (see Salas col. 13, lines 32-34; col. 14, lines 37-39: object access control (i.e. readers field) mechanism for controlling access to objects)
- e) limiting reader access in said readers access field to said child room for a specific user to no more than the access granted said specific user in said first access

control list (see Salas col. 13, lines 32-34; col. 14, lines 37-39: object access control (i.e. readers field) mechanism for controlling access to objects)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salas to operate a collaborative workspace for message communications between members as taught by Maurille, and to modify Salas to enable utilizing standard object oriented techniques such as access control lists (ACLs) controlling access to objects for collaborative space management as taught by Cutler. One of ordinary skill in the art would be motivated to employ Maurille in order to optimize message processing and display capabilities for a networked collaborative communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in order to efficiently enhance security by providing limited visibility of computer resources and protecting data integrity (see Cutler col. 1, lines 47-53).

**Regarding Claim 15** [Currently amended], Salas discloses a computer program product for controlling access to rooms within a collaboration place. However, Cutler discloses a computer program product comprising:

- a) a computer readable medium; (see Salas col. 6, lines 57-63: software (i.e. instructions) to implement collaborative management system)
- b) a first program instructions for maintaining for said collaboration a first access control list identifying those users authorized to enter said place; (see Salas col.



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3, lines 49-57; col. 6, lines 57-63: member information and access controls, instructions)

- c) second program instructions for providing in a child room second access control list identifying a subset of those user authorized to enter said place who are also authorized to enter said child parent room with manager, author, or user access; (see Salas col. 13, lines 32-34; col. 14, lines 44-54; col. 6, lines 57-63: access levels for objects (i.e. rooms), instructions)
- e) fourth program instructions for displaying a parent room to a specific user, said parent room including on said forward pointers a list of children rooms for which said readers fields authorize said specific user access; and wherein said first, second, third, and fourth program instructions are recorded on said computer readable medium. (see Salas Figure 1; col. 6, lines 39-55; col. 6, lines 57-63: display interface for parent room, instructions)
- d) Salas disclose an access control (readers) field with pointers linking rooms and providing a third access control list on said forward pointer, said third access control list providing access to said child room for those members who are included in said second access control list who are also authorized to access said child room. (see Salas col. 13, lines 32-34: object (i.e. room, pointer) access control mechanism) Salas does not specifically disclose forward and reverse (i.e. double-linked) pointers. However, Maurille discloses providing forward and reverse pointers linking said parent room with a child room in a double-linked list. (see Maurille col. 16, lines 17-22; col. 8, lines 33-38; pointers

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with to/from (i.e. forward/backward) pointers for parent/child navigation; col. 6, lines 44-57: database system for member, message information), and Cutler specifically discloses the usage of object oriented technology such as access control list techniques for collaborative space management (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists controlling access to objects, object inheritance- child has equal or less access capabilities of parent).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Salas to operate a collaborative workspace for message communications between members as taught by Maurille, and to modify Salas to enable utilizing standard object oriented techniques such as access control lists (ACLs) controlling access to objects for collaborative space management as taught by Cutler. One of ordinary skill in the art would be motivated to employ Maurille in order to optimize message processing and display capabilities for a networked collaborative communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in order to efficiently enhance security by providing limited visibility of computer resources and protecting data integrity (see Cutler col. 1, lines 47-53).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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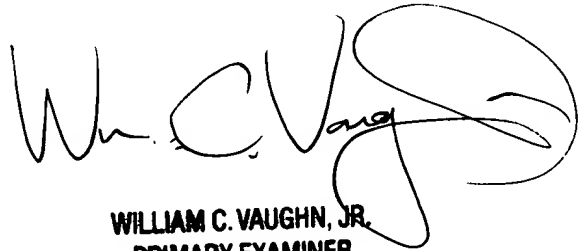
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KHS

Kyung H Shin  
Patent Examiner  
Art Unit 2143

KHS

August 20, 2005

A handwritten signature in black ink, appearing to read 'W. C. Vaughn, Jr.', with a large, stylized flourish at the end.

**WILLIAM C. VAUGHN, JR.  
PRIMARY EXAMINER**